

The opinion in support of the decision being entered today was *not* written for publication in and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* YU ZHENG

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Appeal No. 2006-0950  
Application No. 09/618,497  
Technology Center 3600

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ON BRIEF

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Decided: February 28, 2007

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Before MURRIEL E. CRAWFORD, JENNIFER D. BAHR, and ANTON W. FETTING *Administrative Patent Judges*.

MURRIEL E. CRAWFORD, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. §134 from the examiner's final rejection of claims 1 to 3, 71 and 73, which are all of the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

## STATEMENT OF THE CASE

The appellant's invention relates to a collapsible structure having a plurality of panels that can be folded and collapsed to reduce the overall size of the structure (specification at page 1).

The examiner rejected claims 1 to 3 and 71 under 35 U.S.C. § 103 as being unpatentable over McLeese '407 in view of Chin.

The examiner rejected claims 1 to 3, 71 and 73 as being unpatentable over McLeese '571 in view of Wan.

Independent claims 1 and 73 read as follows:

1. A collapsible structure, comprising:

a single first base panel having a foldable frame member that has a folded and an unfolded orientation, and a material covering the frame member when the frame member is in the unfolded orientation, with the material assuming the unfolded orientation of its associated frame member, the first panel having an outer periphery and a sleeve extending along the outer periphery thereof;

a single second upper panel defined by a single foldable frame member that has a folded and an unfolded orientation, and a material covering the frame member of the upper panel when the frame member of the upper panel is in the unfolded orientation, with the material of the upper panel assuming the unfolded orientation of its associated frame member, the second panel having an outer periphery, opposing first and second end edges and a sleeve extending along the outer periphery thereof;

a first interconnecting fabric piece that couples the sleeve at the first end edge of the second panel to the sleeve of the first panel; and

a second interconnecting fabric piece that couples the sleeve at the second end edge of the second panel to the sleeve of the first panel;

wherein the first and second end edges extend outside the outer periphery of the first panel.

73. A collapsible structure, comprising:

a single first base panel having a foldable frame member that has a folded and an unfolded orientation, and a material covering the frame member when the frame member is in the unfolded orientation, with the material assuming the unfolded orientation of its associated frame member, the first panel having an outer periphery and a sleeve extending along the outer periphery thereof;

a single second upper panel defined by a single foldable frame member that has a folded and an unfolded orientation, and a material covering the frame member of the upper panel when the frame member of the upper panel is in the unfolded orientation, with the material of the upper panel assuming the unfolded orientation of its associated frame member, the second panel having an outer periphery, opposing first and second end edges and a sleeve extending along the outer periphery thereof, with each of the first and second end edges having a straight portion;

a first interconnecting fabric piece that couples the sleeve at the straight portion of the first end edge of the second panel to the sleeve of the first panel;

a second interconnecting fabric piece that couples the sleeve at the straight portion of the second end edge of the second panel to the sleeve of the first panel; and

wherein the first and second end edges extend outside the outer periphery of the first panel.

#### PRIOR ART

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

McLeese	Des. 341,407	Nov. 16, 1993
Wan	5,411,046	May 2, 1995
Chin	5,592,961	Jan. 14, 1997
McLeese	Re. 35,571	Jul. 29, 1997

The appellant contends that the invention of claim 1 would not have been obvious to a person of ordinary skill in the art at the time of the invention. Specifically, the appellant argues that McLeese '407 alone and McLeese and Chin combined do not disclose a first interconnecting piece coupling the sleeve at the first end edge of the second panel to the sleeve of the first panel and a second interconnecting piece coupling the sleeve at the second end edge of the second panel to the sleeve of the first panel. Appellant further contends that McLeese '407 alone or combined with Chin does not disclose that the first and second end edges extend outside the outer periphery of the first panel.

The examiner contends that McLeese '407 alone and in combination with Chin discloses the subject matter of claim 1. Specifically, the examiner contends that element 64 is an interconnecting piece.

The appellant contends that the invention of claim 1 would not have been obvious to a person of ordinary skill in the art at the time of the invention. Specifically, the appellant argues that McLeese '571 alone or in combination with Wan does not disclose a first and second interconnecting piece coupling the sleeve at the first end edge of the second panel to the sleeve of the first panel and a second interconnecting piece coupling the sleeve at the second end edge of the second panel to the sleeve of the first panel. Appellant further contends that McLeese

‘571 alone or in combination with Wan does not disclose that the first and second end edges extend outside the outer periphery of the first panel.

## ISSUES

The first issue is whether the appellant has established that the examiner erred in rejecting claims 1 to 3 and 71 under 35 U.S.C. § 103 as being unpatentable over McLeese ‘407 alone or in combination with Chin. The issue turns on whether McLeese ‘407 alone or in combination with Chin discloses first and second interconnecting pieces as claimed.

The second issue is whether the appellant has established that the examiner erred in rejecting claims 1 to 3 and 71 under 35 U.S.C. § 103 as being unpatentable over McLeese ‘571 alone or in combination with Wan. The issue turns on whether McLeese ‘571 alone or in combination with Wan would have suggested the claimed first and second interconnecting pieces.

## FINDINGS OF FACT

McLeese ‘407 discloses a portable structure having a single upper panel and a single base panel. The upper panel has a curved structure and is directly connected to the bottom panel at an end edge. The interconnecting portion H<sup>1</sup> connects a side portion of the upper panel to the bottom panel. The first and

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<sup>1</sup> The examiner introduced drawing reference markers in the figures on p. 5 of the Answer. These references are not shown in the actual McLeese ‘407 patent.

second end edges of the upper panel do not extend outside the outer periphery of the first panel (top figure on page 5 of answer).

Chin discloses a portable structure having an upper panel 14, side panels 12 and a bottom panel 16 (Figure 1). The side panels are directly connected to the top panel by sewing, tape or Velcro-type fasteners (col. 4, lines 18 to 22; Figure 6). Element 64 is a continuous band on which a flexible material is sewn (col. 4, lines 44 to 51). Chin does not disclose an interconnecting piece connecting a top panel with a bottom panel. In addition, the end edges of the top panel do not extend outside the outer periphery of the bottom panel.

McLeese '571 discloses a self-erecting structure. A top panel is connected to a bottom panel at points of attachment 20 (Figure 1). McLeese does not disclose an interconnecting piece that connects the end edges of the top panel to the sleeve of the bottom portion. In addition, the end edges of the bottom panel do not extend outside the outer periphery of the top panel.

Wan discloses a tent having interconnecting pieces 32 connecting side panels 30 (col. 2, lines 64 to 67). Wan does not disclose interconnecting pieces to connect a top panel to a bottom panel.

## ANALYSIS

Sections H (as depicted in marked top figure on page 5 of answer) of McCleese '407 do not connect the end edges of the second or upper panel to the sleeve of the bottom or first panel. The end edges of the second or upper panel do not extend outside the outer periphery of the first or bottom panel. Therefore, the disclosure of McCleese does not suggest the subject matter of claim 1.

Likewise as Chin does not disclose an interconnecting piece which connects the end edges of a second or upper panel to the sleeve of the bottom or first panel so that the end edges of the second or upper panel extend outside the outer periphery of the first or bottom panel, the combined teachings of McCleese '407 and Chin do not suggest the subject matter of claim 1 or claims 2, 3 and 71 dependent thereon.

McCleese '571 does not disclose an interconnecting piece which connects the end edges of a second or upper panel to the sleeve of the bottom or first panel so that the end edges of the second or upper panel extend outside the outer periphery of the first or bottom panel.

Likewise, Wan does not disclose an interconnecting piece which connects the end edges of a second or upper panel to the sleeve of the bottom or first panel so that the end edges of the second or upper panel extend outside the outer periphery of the first or bottom panel. The teaching in Wan of interconnecting pieces 32 to connect side panels is not suggestive of use of the panels to connect an upper panel to a bottom panel. The combined teachings of McCleese '571 and Wan do not suggest the subject matter of claim 1 and claims 2 to 3 and 71 dependent thereon. In addition, as claim 73 recites similar language to claim 1 regarding the interconnecting pieces, the combined teachings of McCleese '571 and Wan do not suggest the subject matter of claim 73.

#### CONCLUSIONS OF LAW

On the record before us, appellant has sustained its burden of establishing that the examiner's rejection is not supported by a legally sufficient basis for holding that the claimed subject matter would have been obvious within the meaning of § 103.

Appeal Number: 2006-0950  
Application Number: 09/618,497

ORDER

The examiner's rejection of claims 1 to 3, 71 and 73 is reversed.

REVERSED

MURRIEL E. CRAWFORD  
Administrative Patent Judge

JENNIFER D. BAHR  
Administrative Patent Judge

ANTON W. FETTING  
Administrative Patent Judge

) BOARD OF PATENT  
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